

ABSTRACT

A semiconductor device (100) comprises a processor unit (110) including an internal CPU (113), an internal interface section (130), an external interface section (140) including an interface unit (143) connected to an external CPU (201), a plurality of processing circuits (121)-(126), and a connection control circuit (180). The internal interface section (130) includes a first bus (191) connected to the internal CPU (113), a second bus (192) connected to the external CPU (201) through the interface unit (143), and selecting circuits (131)-(136), controlled by the connection control circuit (180) according to the instruction of the internal CPU (113) or the external CPU (201), and operable to select respective connections of the plurality of processing circuits (121)-(126) to the first bus (191) or to the second bus (192). All the processing circuits (121)-(126) are controllable by the internal CPU (113) and the external CPU (201).